

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-9. (Canceled)

10. (Currently Amended) An intravascular catheter having a distal end and a proximal end, the catheter having a distal region proximate the distal end, the catheter comprising:

an inner layer extending from the distal end to the proximal end; and

a reinforcing braid layer disposed over the inner layer, the braid layer formed from at least two continuous wires woven together, the braid layer comprising a proximal braid section in which each of the continuous wires has a proximal diameter, and a distal braid section in which each of the continuous wires has a distal diameter, wherein the proximal diameter of each of the continuous wires is constant throughout the proximal braid section and the distal diameter of each of the continuous wires is constant throughout the distal braid section;

wherein each continuous wire extends through the proximal braid section and through the distal braid section, and the distal diameter of each of the continuous wires is about 1.0 millimeters and the proximal diameter of each of the continuous wires is about 1.5 millimeters; and

wherein each of the continuous wires of the reinforcing braid layer includes a step-wise transition ~~transitions directly~~ from the distal diameter of each of the continuous wires to the proximal diameter of each of the continuous wires and wherein the transition occurs in less than one revolution of the wire.

11. (Canceled)

12. (Original) The catheter of claim 10, further comprising an outer layer disposed over the reinforcing braid layer.

13-26. (Canceled)

27. (currently amended) An intravascular catheter comprising:

an elongate shaft having a proximal end and a distal end, the elongate shaft having a proximal portion having a first flexibility and a distal portion having a second flexibility greater than the first flexibility;

the elongate shaft including a reinforcing braid layer formed of at least two continuous wires interwoven together, wherein the reinforcing braid layer includes a proximal braid section throughout the proximal portion of the elongate shaft, and wherein the reinforcing braid layer includes a distal braid section throughout the distal portion of the elongate shaft;

wherein each of the continuous wires extends through the proximal braid section and through the distal braid section;

wherein each of the continuous wires has a first diameter in the proximal braid section, and each of the continuous wires has a second diameter in the distal braid section, wherein the first diameter of each of the continuous wires in the proximal braid section is greater than the second diameter of each of the continuous wires in the distal braid section, wherein each of the continuous wires has a constant diameter throughout the proximal braid section and a constant diameter throughout the distal braid section; and

wherein each of the continuous wires of the reinforcing braid layer includes a step-wise transition ~~transitions directly~~ from the first diameter of each of the continuous wires to the second diameter of each of the continuous wires.

28. (Previously Presented) The intravascular catheter of claim 27, wherein the first diameter is about 1.5 millimeters, and the second diameter is about 1.0 millimeters.

29. (Currently Amended) An intravascular catheter comprising:

an elongate shaft having a proximal end and a distal end, the elongate shaft having a proximal portion having a first flexibility and a distal portion having a second flexibility greater than the first flexibility;

wherein the elongate shaft includes an inner layer, an outer layer, and a reinforcing braid layer disposed between the inner layer and the outer layer, the reinforcing braid layer formed from at least two continuous wires interwoven together, wherein the reinforcing braid layer

includes a proximal braid section throughout the proximal portion of the elongate shaft, and wherein the reinforcing braid layer includes a distal braid section throughout the distal portion of the elongate shaft;

wherein each of the continuous wires extends through the proximal braid section and through the distal braid section;

wherein each of the continuous wires has a first diameter in the proximal braid section, and each of the continuous wires has a second diameter in the distal braid section, wherein the first diameter of each of the continuous wires in the proximal braid section is greater than the second diameter of each of the continuous wires in the distal braid section, wherein each of the continuous wires has a constant diameter throughout the proximal braid section and a constant diameter throughout the distal braid section;

wherein the second diameter of each of the continuous wires in the distal braid section is about one-third less than the first diameter of each of the continuous wires in the proximal braid section; and

wherein each of the continuous wires of the reinforcing braid layer includes a step-wise transition ~~transitions directly~~ from the first diameter of each of the continuous wires to the second diameter of each of the continuous wires.

30. (Previously Presented) The intravascular catheter of claim 29, wherein the first diameter is about 1.5 millimeters, and the second diameter is about 1.0 millimeters.

31. (Canceled)

32. (Previously Presented) The intravascular catheter of claim 29, wherein distal braid section extends to the distal end of the elongate shaft.

33. (Previously Presented) The intravascular catheter of claim 32, wherein the proximal braid section extends to the proximal end of the elongate shaft.